## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/087814 A1

(51) International Patent Classification7: C09D 11/00

C09B 45/48.

(21) International Application Number:

PCT/GB2004/001088

(22) International Filing Date: 15 March 2004 (15.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0307695.7

2 April 2003 (02.04.2003) GB

- (71) Applicant (for all designated States except US): AVECIA LIMITED [GB/GB]; Hexagon House, Blackley, Manchester M9 8ZS (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WRIGHT, Gavin [GB/GB]; P.O. Box 42, Hexagon House, Blackley, Manchester M9 8ZS (GB). GREGORY, Peter [GB/GB]; 129 Armadale Road, Bolton BL3 4UN (GB).
- (74) Agents: MORPETH, Fraser, Forrest et al.; Avecia Limited, Intellectual Property Group, PO Box 42, Hexagon House, Blackley, Manchester M9 8ZS (GB).

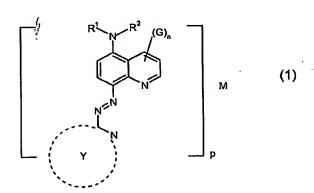
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MAGENTA METAL CHELATE DYES AND THEIR USE IN INK-JET PRINTERS



(57) Abstract: A metal chelate of Formula (1) or salt thereof: Formula (1) wherein: R1 and R2 are each independently H or an organic group; M is a metal; p is 1 to 4; Y is an optionally substituted heterocyclic ring with a nitrogen ortho to the azo bridge; G is a substituent; and n is 0 to 5. Also ink-jet inks, cartridges and processes.